

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-31. (Canceled).

32. (Currently Amended) A method of forming a feature on a substrate ~~that includes~~ comprising:

performing a first exposure₁ with an alternating phase shift mask with full size scattering bars, on the substrate; and

performing a second exposure₂ with a tritone attenuated mask having at least one scattering bar, on the substrate, wherein said scattering bars are not printed in the resulting pattern feature from the lithography process second exposure.

33. (Previously presented) The method of claim 32 wherein said first exposure is comprised of patternwise exposing a positive tone photoresist layer on said substrate through said alternating phase shift mask with scattering bars using radiation comprised of one or more wavelengths from about 150 nm to 600 nm.

34. (Previously presented) The method of claim 32 further comprised of a single development step which follows the second exposure.

35. (Previously presented) The method of claim 33 wherein the resulting pattern is comprised of line widths that are between $1/4$ and $1/2$ of the exposing wavelength in size.

36. (Previously presented) The method of claim 32 wherein said alternating phase shift mask is comprised of phase shift regions having a phase width that are separated by chrome regions.

37. (Previously presented) The method of claim 36 wherein said chrome regions are comprised of chrome lines that are used to define shrunken gates in said resulting pattern and full size scattering bars wherein from one to three scattering bars are positioned between each chrome line

38. (Previously presented) The method of claim 37 wherein each chrome line and full size scattering bar separates a 0° phase shift region from a $(180 + \theta)^\circ$ phase shift region wherein θ is from 0 to 180.

39. (Previously presented) The method of claim 37 wherein said full size scattering bars have a width that is equal to or greater than the width of said chrome lines that define the shrunken gates.

40. (Previously presented) The method of claim 37 wherein said 0° phase shift region and said $(180 + \theta)^\circ$ phase shift region have phase widths that are equivalent.

41. (Previously presented) The method of claim 32 wherein the tritone attenuated mask is comprised of a transparent region, an attenuated phase shift region, and a chrome block region that protects a shrunken gate formed by said first exposure.

42. (Previously presented) The method of claim 41 wherein said attenuated phase shift region is comprised of an interconnect line feature having a width and a scattering bar which is a line parallel to said interconnect line feature and separated therefrom by a certain distance.

43. (Previously presented) The method of claim 42 wherein said scattering bar has a width that is 33% to 100% of the width of said interconnect line feature.

44. (Previously presented) The method of claim 42 wherein said certain distance between said scattering bar and said interconnect line feature is from about one to two times the width of said interconnect line feature.

45. (Previously presented) The method of claim 42 wherein said scattering bar is sub-resolution in width.